

**REMARKS**

Claims 17-36 are pending in this application. By this Amendment, claims 17 and 35 are amended. These amendments are supported by Applicants' specification at least at, page 5, lines 3-9. Claim 36 is added. The specification is amended. No new matter is added. Reconsideration of the application based on the above amendments and the following remarks is respectfully requested.

The courtesies extended to Applicants' representatives by Examiner Memula at the interview held March 17, 2009 are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below, which constitute Applicants' record of the interview.

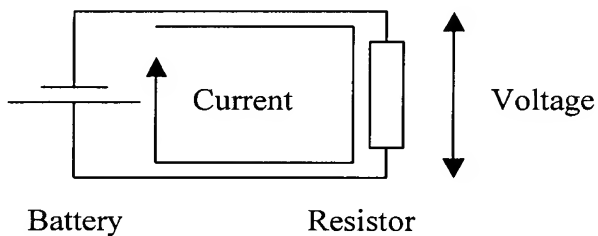
The Office Action rejects claims 17-29 and 31-35 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application Publication No. 2003/0155963 to Huang. This rejection is respectfully traversed.

Claims 17 and 35 recite, among other features, the subassemblies being powered in a series arrangement by their supply terminals from terminals of a voltage supply source.

Huang teaches at, *e.g.*, paragraph [0011], a charge pump circuit that includes at least one voltage-boosting stage and at least one voltage multiplier. Further, Huang teaches at, *e.g.*, Abstract, that the charge pump circuit is used for generating a higher output voltage when inputting a voltage regularly. Thus, Huang teaches  $V_{out}$  greater than  $V_{DD}$ .

Huang teaches at, *e.g.*, paragraph [0003], charge stored on capacitor 114 transferred to capacitor 115 via diode-coupled transistor 118. In a similar manner the charge is transferred from capacitor 115 to capacitor 116 then to capacitor 117 and finally  $C_{out}$ . Thus, Applicants respectfully assert that Huang teaches current flowing in the direction from  $V_{DD}$  to  $V_{out}$ . Therefore, the current flow through boosting stages 201-204 is opposed the voltage across the boosting stages 201-204.

As discussed during the personal interview, for the simple case of a battery with a resistor connected across the battery (as shown in the figure below) the current flows through the resistor in the same direction as the applied voltage. Thus, the resistor dissipates power and is powered. On the other hand, the current flowing through the battery is opposed to the voltage across the battery terminals. Thus, the battery provides power for the resistor. The power provided by the battery, which is the voltage times the current, is the same as the power dissipated by the resistor, which is also voltage times the current. Therefore, as discussed during the personal interview, the boosting stages 201-204 are providing power to  $V_{out}$ , not powered by  $V_{out}$  because of the relative directions of voltage and current.



Thus, Huang does not teach the boosting stages 201-204 powered in a series arrangement by  $V_{DD}$  and  $V_{out}$ .

For at least the foregoing reasons, Applicants respectfully assert that Huang cannot reasonably be considered to teach the combinations of all of the features positively recited in claims 17 and 35. Further, Huang cannot reasonably be considered to teach the combinations of all of the features recited in claims 18-29 and 31-34 for at least the dependence of these claims on allowable base claims, as well as for the separately patentable subject matter that each of these claims recites.

Accordingly, reconsideration and withdrawal of the rejection of claims 17-29 and 31-35 under 35 U.S.C. §102(e) as being anticipated by Huang are respectfully requested.

The Office Action rejects claim 30 under 35 U.S.C. §103(a) as being unpatentable over Huang in view of one or more of U.S. Patent Application Publication No. 2004/0077151 to Bhattacharyya, U.S. Patent Application Publication No. 2004/0087084 to Hsieh, U.S. Patent Application Publication No. 2004/0094763 to Agnello et al. (hereinafter "Agnello") and U.S. Patent No. 2004/0018668 to Maszara. This rejection is respectfully traversed.

As argued above, Huang cannot reasonably be considered to have suggested the combination of all of the features recited in claim 17. None of the secondary references are cited as remedying the deficiencies of Huang. Therefore, the combination of Huang with Bhattacharyya, Hsieh, Agnello and Maszara cannot reasonably be considered to have suggested the combination of all of the features recited in claim 30 for at least the dependence of this claim on allowable base claim 17, as well as for the separately patentable subject matter that this claim recites.

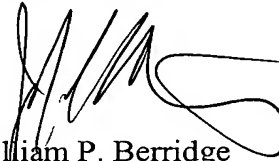
Accordingly, reconsideration and withdrawal of the rejection of claim 30 under 35 U.S.C. 103(a) as being unpatentable over Huang in view of one or more of Bhattacharyya, Hsieh, Agnello and Maszara are respectfully requested.

Added claim 36 is allowable at least for the inclusion of the feature discussed above with respect to, for example, claims 17 and 35 that is not disclosed in Huang, or any combination of the applied references with Huang.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 17-36 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



William P. Berridge  
Registration No. 30,024

Joel S. Armstrong  
Registration No. 36,430

Attachment:  
Petition for Extension of Time

Date: March 20, 2009

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 320850**  
**Alexandria, Virginia 22320-4850**  
**Telephone: (703) 836-6400**

<p><b>DEPOSIT ACCOUNT USE AUTHORIZATION</b> Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
---